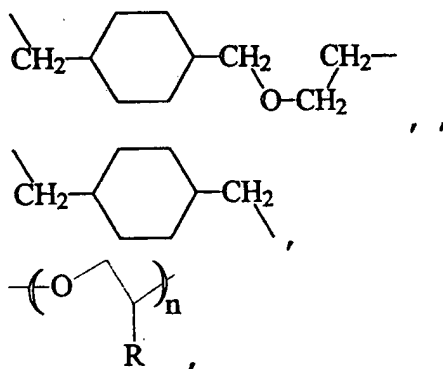


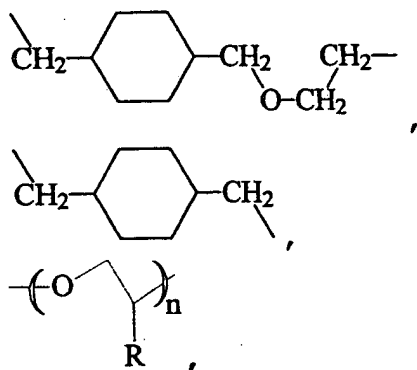
3. The dental material according to Claim 1, wherein the residue Y has one or more of the following groups:



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a' wherein R represents hydrogen or methyl; and n represents a whole number in the range of 1-10.

4. The dental material according to Claim 2, wherein the residue Y has one or more of the following groups:



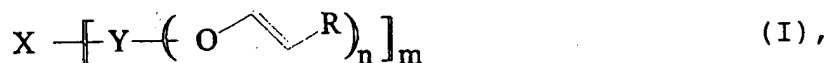
wherein R represents hydrogen or methyl; and n represents a whole number in the range of 1-10.

5. A dental material comprising at least one cationically polymerizable monomer as a binder, a polymerization initiator, and based on the dental material, 1-95 wt% of at least one inorganic filler, said binder containing at least one monomer of formula (I):



wherein R represents hydrogen, a methyl or ethyl group; X and Y independently represent an unsubstituted or substituted aliphatic, cycloaliphatic, or aromatic residue with 1-100 carbon atoms, wherein one or more CH<sub>2</sub> groups can be replaced by O, C=O, -CO<sub>2</sub>, -SiR<sup>1</sup><sub>2</sub>-, and/or -SiR<sup>1</sup><sub>2</sub>O-, wherein R<sup>1</sup> independently represents an alkyl or alkoxy or aryl residue with 1-10 C atoms; n represents a whole number of 1-3; and m represents a whole number of 2-5; and wherein the monomers of formula (I) have a molecular weight in the range of 300-3000.

6. A dental material comprising at least one cationically polymerizable monomer as a binder, a polymerization initiator, and based on the dental material, 1-95 wt% of at least one inorganic filler, said binder containing at least one monomer of formula (I):

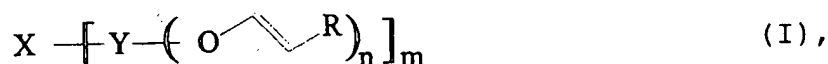


wherein R represents hydrogen, a methyl or ethyl group; X and Y independently represent an unsubstituted or substituted aliphatic, cycloaliphatic, or aromatic residue with 1-100 carbon atoms, wherein one or more CH<sub>2</sub> groups can be replaced by O, C=O, -CO<sub>2</sub>, -SiR<sup>1</sup><sub>2</sub>-, and/or -SiR<sup>1</sup><sub>2</sub>O-, wherein R<sup>1</sup> independently represents an alkyl or alkoxy or aryl residue with 1-10 C atoms; n represents a whole number of 1-3; and m represents a whole number of 2-5; and wherein the binder has a viscosity in the range of 1 mPa·s to 1000 mPa·s.



14. A dental material comprising at least one cationically polymerizable monomer as a binder, a polymerization initiator, and based on the dental material, 1-95 wt% of at least one inorganic filler, said binder containing at least one monomer of formula (I):

wherein R represents hydrogen, a methyl or ethyl group; X and Y independently



Q<sup>2</sup> represent an unsubstituted or substituted aliphatic, cycloaliphatic, or aromatic residue with 1-100 carbon atoms, wherein one or more CH<sub>2</sub> groups can be replaced by O, C=O, -CO<sub>2</sub>, -SiR<sup>1</sup><sub>2</sub>-, and/or -SiR<sup>1</sup><sub>2</sub>O-, wherein R<sup>1</sup> independently represents an alkyl or alkoxy or aryl residue with 1-10 C atoms; n represents a whole number of 1-3; and m represents a whole number of 2-5; and

wherein the flexural strength of the dental material is  $\geq 30 \text{ N/mm}^2$  in accordance with DIN 53 452, and/or the modulus of elasticity of the dental material is  $\geq 500 \text{ N/mm}^2$  in accordance with DIN 53 457.

17. The dental material of claim 16, wherein the flexural strength of the dental material is  $\geq 100 \text{ N/mm}^2$  in accordance with DIN 53 452, and/or the modulus of elasticity of the dental material is  $\geq 100 \text{ N/mm}^2$  in accordance with DIN 53 457.

Q<sup>3</sup> 18. The dental material of claim 1, wherein the filler has a particle size of 0.02-100  $\mu\text{m}$ .

19. The dental material of claim 1, wherein the filler has a particle size of 0.1-5  $\mu\text{m}$ .

23 20. The dental material of claim 1, wherein the binder has a viscosity in the range of 1 mPa·s to 6 Pa·s.

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